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Original Essays.

ART. I.—*Remarks on the inverted uterus, with an account of an operation for its removal, extracted from a dissertation submitted for examination to the Provost, Trustees and Faculty of Physick of the University of Maryland, by Willison Hughey, of Pittsburgh, Pennsylvania.*

It is not within the bounds of my present design, to notice all the causes conducive to the disease under consideration, but simply to state those which are known to produce it most frequently, and which may be divided into the remote and proximate. And first of the remote causes of the accident—they are such debilitating agents as induce an atony, or inability in the body and neck of the organ to contract, thereby favouring the descent of the fundus through the cervix uteri. They are long-continued expulsive efforts to accomplish delivery, compound pregnancy, weakening passions of the mind, and profuse hemorrhage. Next, of the proximate cause, which appears to be a combination of circumstances directly tending to the disease *itself;* and it is most probable that, from certain causes, the uterus takes on an irregular contraction, which must par-

ticularly affect the fundus by lessening its volume, while the body and neck remain in a state of extreme flaccidity. In this state of things, any considerable weight appended, or force applied to the fundus, capable of effecting its descent through the os internum, would produce the disease in question. Inversion of the uterus may be either *complete*, or *incomplete*—by a complete inversion is meant, the passing of the fundus and body through the os internum, or its being turned inside out, even to the very neck of the organ, "but it is not necessary to a complete inversion, that the body and fundus escape through the os externum." The incomplete takes place in different degrees, as where the fundus descends to the os tincæ, but is prevented from passing by the contraction of the latter; or it may pass half way through the mouth of the uterus, and it may be completely inverted, except a small portion of the neck. "In the latter of these conditions, the body may be compressed or strangulated, by the contraction of the neck on the protruded part, or it may be free from this restraint." Each of these conditions of the organ presents different indications of cure, which are amply provided for, and elaborately treated of by authors, whose sphere of observation has by no means been limited. The symptoms resulting from the displacements of the organ are of the most alarming nature, producing but too frequently fatal consequences. When the uterus is inverted, says Mr. Burns, "the woman feels great pain, accompanied with a bearing down effort, by which a partial inversion is sometimes rendered complete." The pain is obstinate and severe, the woman feels very weak, the countenance is pale, the pulse feeble and often imperceptible: a hemorrhage often attends the accident, and is most profuse. "But it is worthy of notice that complete inversion is sometimes unattended with hemorrhage, whilst a partial inversion may be, and often is, attended with a fatal one." Fainting and convulsions are frequent attendants, although the hemorrhage may have been trifling. This disease is most frequently occasioned by the too rapid expulsion of the child from the uterus, particularly if the cord be short or entangled

about its neck; the organ may be taken by surprise, (if I may be allowed the expression,) and become suddenly inverted. We are also informed that polypus has been known to give rise to this disease in the unimpregnated female, and it is easy to conceive how it might happen from such a cause. If the polypus be attached to the fundus uteri, the continued operation of its weight might in time drag it through the os tincæ. But I am disposed to believe that the majority of cases which occur, are solely attributable to the mismanagement of *midwives*, and it is with myself a matter of great surprise that so few cases occur, when we consider the sheer ignorance of thousands, who are permitted to practice the obstetric art. Indeed, I have had an opportunity of witnessing the baneful effects of ignorance exemplified in two cases, when officious *women*, by repeated traction at the funis succeeded, not in extracting the placenta, but in tearing forcibly from it the cord, there being very firm adhesion between the after-birth and the uterus. Inversion in a majority of instances, I believe, takes place in this way. The *accoucheur* through ignorance, grasps the cord, with a view to the delivery of the placenta, and forcibly drags at it, (the placenta being situated in the fundus uteri, and with this other circumstances being present predisposing to the disease.) The irritation occasioned by the ill-timed efforts of the widwife causes the fundus uteri to contract, thereby favouring its descent. In this state of things the power continuing to operate, and the inferior portion of the womb being in an atonic state, nothing but the interposition of Providence can rescue the unconscious, confiding sufferer, from the danger which threatens her.

The disease under consideration may terminate in different ways, as by fatal hemorrhage, syncope, convulsions, or inflammation; or the patient may partially recover from it, after much pain and violent expulsive efforts, the uterus gradually returning to its natural size, and giving, in some instances, but trifling inconvenience to the patient. It may also take on diseased action, terminating in foul, ill-conditioned ulcers, giving rise to

frequent hemorrhage, an ichorous discharge, and hectic fever, which gradually destroy the patient. With regard to the pathognomonic symptoms of the disease under consideration, they may be enumerated briefly. "When a patient, after delivery, complains of obstinate pain, or bearing down, or suppression of urine, or is very weak, we should always examine per vaginam. If the uterus be inverted we may feel the tumour, and we may find the hard womb to be absent in the belly, or lower down than it should be; if this examination be neglected, the patient may be lost." The treatment necessary to the reposition of the inverted uterus having been particularly described by Denman, Burns, and other respectable writers on this subject, I deem it unnecessary to recapitulate, and shall therefore address myself particularly to the *object* of this paper.

In the early part of the summer of 1824, during my residence in the country, I was requested to visit a poor woman named Jane Mc——, aged 39 years, naturally athletic, but who, from a protracted illness of ten years standing, had become considerably emaciated. On my arrival I was informed by the patient, that her menstrual discharge had continued on her too long, that it was unusual in quantity, as well as quality; indeed the evacuation was so excessively copious, that she fainted upon the slighest exertion. Her face was deathly pale, lips livid, and eyes sunken as though they had receded in their sockets; respiration difficult, pulse frequent, and almost imperceptible. She complained of a gnawing pain in the loins, and a "burning heat in the womb" to use her own expression; her feet and hands were very cold, and the former somewhat œdematous. In this unpromising condition I found her, warranting, I think, the opinion that I gave, and which was unfavourable to her recovery. At this time I was ignorant of the true nature of her case, for she, from an obstinacy common to many of the lower order of people, had concealed it most scrupulously, otherwise I should have pronounced her disease fatal, unhesitatingly. However, in this alarming state of things, her extreme debility at once suggested the only efficient plan that

could be instituted, with the slightest hopes of success, and, accordingly, I ordered her warm brandy toddy, with spirits of ammonia, to have astringents employed per vaginam, and to swallow small doses of camphor with opium, with a view to their stimulating, as well as to their anodyne effects; to have stimulating cataplasms applied to her feet, and that she should remain perfectly quiet until my next visit, which would be on the following morning. On the 7th of June, I paid her a visit, and found that my orders had been punctually attended to, and that her system had reacted to such a degree, as to favour the prospect of her recovery. When I began to question her respecting her symptoms, as to the discharge, whether it was checked or not, she observed, that she was "partly relieved of it" and continued, "I did not tell you all that ailed me yesterday, because I was not certain that you could relieve me, but now I will tell you every thing that relates to my case. About ten years since, I was delivered of a child by an old woman, to whose mismanagement I attribute all my after suffering, and, since that time, I am not as I once was, for she pulled down my womb." I attempted to pass my hand up to the vagina, but it came in contact with a tumour, as large as the head of a newly born infant. On discovering this, I threw aside her covering, and had ocular demonstration of the fact. I continued my examination, by endeavoring to pass my right index finger, between the protrusion and the left side of the vulva, but soon perceived an insuperable obstacle in the way—I could insinuate my finger about one inch and a half in the direction of the vagina, but no further, for at that point its walls appeared as if reflected upon the cervix of the protrusion, and continuous with it in its descent. I then desisted from further attempts to pass my hand, directing attention exclusively to the outward aspect of the tumour. Within, and for a short distance below the os externum, the cervix of the tumour had a pale red appearance, not apparently in a state of high inflammation, but near the fundus it was very highly inflamed, tense and unyielding, with several fissures and ulcers interspersed. These fissures or splits

appeared to effuse a dark, ichorous fluid, and the ulcers presented a deep and ragged aspect, discharging matter exceedingly offensive. My patient also informed me that, from the time she weaned her child, she had menstruated with as much regularity as she had done prior to the accident; and that she had often observed the menstrual fluid exuding from the displaced organ, I was now perfectly convinced as to the nature of the case, and pronounced it to be inverted uterus. After getting possession of the circumstances already related, I questioned her as to the conduct of the *widwife*, during the accouchement, whether *she* had noticed any thing peculiar in the case; but was informed that no observations had escaped from the midwife at the time, except that "the after-birth was grown fast." My patient also informed me that the flooding, on the occasion, was very alarming, so much so, that the *woman* in *attendance*, insisted upon the necessity of a speedy delivery of the after-birth, and in accordance with what she thought the best practice, made forcible traction by the cord, which had the unhappy effect of inverting the organ. The pain experienced during this murdrous *operation*, can be more easily conceived than expressed; she informed me that the severity of the pain abated soon after the placenta was extracted, and with it the flooding. She was confined to her bed some fifteen or twenty days after the accident, in consequence of debility, and the inconvenience of the protrusion, (for it diminished in bulk very slowly,) when she began to move about, and eventually with less inconvenience than could reasonably be supposed. This improved state of things continued as long as she nursed her child, at least during *lactation;* and it is a matter of some surprize, that when that secretion ceased, the womb enlarged and took on a diseased appearance, which gradually degenerated into what I have already described in speaking of the organ when it first became the objeet of my attention. At this time I conceived the uterus to be in a sloughing condition, particularly near the fundus, where two or three black spots had appeared, independent of the marks of disease before alluded to. I immediately ordered

the carbonated poultice to be applied to the womb, and renewed every five or six hours, and the tumour to be fomented with oak bark juice, after the removal of each poultice. I also prescribed as much of the best bark and wine as her stomach would bear, to be repeated at the end of every two hours, to have her bowels opened by injections, and to remain as quiet as possible. Having continued the above plan of treatment for three days, without perceiving any beneficial results, but finding, on the contrary, that a considerable portion of the fundus had actually begun to slough, giving rise to a renewal of the hemorrhage, I thought it expedient to devise some other plan. In this hopeless state of things, I reflected upon the exigency of the case, upon the inadequacy of the plan instituted with a view to its arrestation, and concluded, that nothing short of an entire removal of the organ would afford her even a chance of recovery. With this view, I advised an operation, which was unhesitatingly acceded to, both by herself and friends. Having placed my patient in the most advantageous situation, I carried a strong waxed ligature under the cervix uteri, brought the extremities together on the anterior surface, and cast a slack knot, so as to admit of its being moved up the vagina, on the included substance. I then took hold of the extremities of the ligature with my right hand, and with the left, passed my ligature as high as was possible on account of the inverted portion of the vagina. The ligature being placed where I intended it should remain, was tightened and secured with three knots; this step in the operation occasioned exceeding pain; so great was the torture which she suffered for twenty minutes, that I thought I should have been obliged to remove the cord, although I tied it as tight as possible. For a short time subsequent to the operation, I repented seriously the expedient which I had adopted; although my patient had taken upwards of one hundred drops of laudanum, yet I was apprehensive that spasm would supervene and carry her off; but fortunately the pain abated, and left her perfectly easy. The operation being performed, and the patient relieved from pain, I recommended quietness with a continuance of the tonic plan as before directed.

On the 11th June, I again visited my patient, and found her much better than I anticipated, somewhat improved in strength and spirits, and entertaining the most sanguine hopes of recovery; she had slept soundly through the night, without evidencing to her friends, who carefully watched her, the slightest pain or uneasiness. I next turned my attention to the womb, and found its circulation perfectly arrested by the ligature. This I judged to be the fact from the coldness and discolouration present. Seeing that the operation was progressing so favourably, and considering any addition to the plan already instituted improper, I took my leave, promising to see her on the following day.

12th. Appearances not quite so flattering as formerly—pulse tense, and frequently attended with an obtuse pain in the hypogastric region; flushed countenance, costive bowels, and considerable thirst, with other symptoms indicating inceptive inflammation. The tonic plan was now discontinued, and vene-section immediately brought into requisition; blood was drawn until the pain and uneasiness subsided, and oleum ricini was exhibited, aided by enemata, which had the happy effect of relieving constipation in a few hours. Her symptoms by this treatment yielded considerably, pulse full and less frequent, but the thirst continuing with a dry state of the skin, which subsequently yielded to the use of the nitrous powders combined with tart. antimon., taken in doses of ten grains of the former, combined with one grain of the latter, repeated once in two hours. The uterus at this period had assumed a perfectly black appearance, and diminished very much in volume, from a sudden discharge of putrid blood lodged in its cavity. This circumstance greatly alarmed the patient, as she attributed the discharge to a displacement of the ligature, which was found not to be so, on examination.

13th. I found the condition of my patient somewhat improved; pulse not so tense, and less frequent, than on the preceding day, but the pain not entirely removed. Blood was again drawn until the pain subsided; a mustard cataplasm was laid over the abdomen, which was suffered to remain ten hours, and injections were at the same time exhibited, composed of spirits

of turpentine, with linseed mucilage, which had the effect of removing all the disagreeable symptoms then present.

14th. My patient this morning has a slight difficulty in micturition, unattended with fever, and has slept comfortably through the night; there is also a slight hæmorrhage present, resulting from a partial division of the *substance* included in the *cord*, and which was promptly relieved by the application of a second ligature, aided by astringent injections. The irritation in the neck of the bladder, I attributed to continuous sympathy, and therefore prescribed nothing, but ol ricini, with mucilaginous drinks.

15th. Still continues to improve, no appearance of hæmorrhage, free from fever, has some appetite, which I permit her to indulge sparingly, on account of her exceeding great weakness. Upon examining the ligature this morning, with a view to ascertain whether it still retained its position; the whole substance of the womb came away in a state of putrescency, so that its *structure* and *peculiarities* could not be recognized. I put her now upon the use of astringent injections, composed of oak bark juice, with sulphate of alum, to be used four times a day; by steadily persevering on this plan the discharge ceased from the vagina, with every other untoward symptom.

On the 18th, I made an examination, per vaginam, with a view to ascertain the condition of the parts within, and found the vagina completely *consolidated* at the point where the ligature had been situated, which was about one inch and a half from the external labia. My patient was now freed from the loathsome disease under which she had so long laboured, and once more began to derive enjoyment and pleasure, from sources, that to her, appeared dried up forever. The debility consequent upon this operation, as may be supposed, left the patient exceedingly emaciated, from which she gradually recovered by the use of the cold bath and tonics.

Six weeks after the ligature had been applied, my patient was sufficiently recovered in strength to walk the distance of one mile, without the aid of an assistant. When she first began to walk, a considerable uneasiness was experienced in the pubic

region, at times, almost amounting to pain, which was remedied by the use of a strong flannel roller and friction. At the end of four months every symptom of abdominal irritation had disappeared; her appetite became craving for food, which she indulged not sparingly; so that she increased in vigour and corpulency, to an astonishing degree, in fact about six months subsequent to the removal of the uterus, I questioned her relative to her health and feelings, when she informed me that her health, never had been better, and that she had but one *thing* to complain of, which was *bulkiness* of body; observing at the same time, that she had increased in weight nearly forty pounds since the operation had been performed. After she had recovered from the immediate effects of the operation which have been already described, there succeeded an uninterrupted interval of good health, of eight or nine months, when she was suddenly seized with pain in the right side, extending to the shoulder of the same side, fever and confined bowels; with other symptoms indicating diseased liver. For the removal of this disease she was bled from *time* to *time*, evacuated freely with calomel purgatives, and was blistered. The disease appeared to yield to this plan of treatment, but left her in a state of debility, from which she never perfectly recovered; her feet became ademato̲us, countenance sallow, with a propensity to night sweats and other hectic symptoms, indicating great irritability of system, consequent upon a worn out constitution. My patient now exhibited strong indications of *ascites*, such as loss of appetite, inactivity, extreme dryness of skin, diminution of the natural discharges of urine and costiveness. After these symptoms had continued for a short time, a slight protuberance was perceived in the hypogastrium, which progressed gradually, and kept increasing, until the whole abdomen become swelled and tense. She was now so far exhausted that the direct depletory system was out of the question, and other means were instituted for the purpose of evacuating the collected water. To answer this intention, calomel, with opium and squills, were administered in the usual doses, until the mouth became sore; but without the usual good, that

frequently results from this prescription. After giving the medicines already mentioned a fair trial, I thought it expedient to draw off the water, which was done in the usual way, and apparently with the happiest effects, for by resuming the former plan with the addition of nitre, I believed that she was cured. She, however, remained weak and emaciated as I have before stated, and in a short time afterwards contracted the dysentery, for which she took no medicine, and died on the fourth day of her last illness. After her death, I requested permission to examine the body, but the ignorance and prejudice of her friends, precluded the possibility of succeeding, so that I am consequently unable to say any thing of post-mortem appearances.

ART. II.—*On the Influence of Heat and Cold in the production and cure of disease.*—(*Continued from page* 55.)

Remediate agency of Heat and Cold.—There is perhaps no disease assailing the human system, in which heat is a more indispensible remedy, than in cholera morbus. This disease, in its onset, is, we believe, invariably accompanied with a rapid recession of blood from the surface, extreme pallor, and remarkable coldness, especially of the extremities. The stomach, liver and intestines, become the centre of fluxion, toward which the circulating fluids seems to be powerfully impelled. Heat is most generally the predisposing cause of this affection, and sudden transitions from heat to cold, suppressing action on the surface, and inverting nervous and vascular excitement, are as uniformly the exciting causes. We have become thoroughly convinced of the importance of external heat in the treatment of this disease, by our own observation and experience. It is not only in itself a powerful agent, (the remedy which nature seems to indicate) with which to assail this shivering offspring of cold, but it is an indispensible adjuvant to all other remedies. Indeed,

we have rarely seen the symptoms of this malady yield to internal remedies until, by their means or by others, warmth had been restored to the surface and extremities. This is precisely what we should anticipate, because the absence of vital warmth and action from the surface, and its accumulation in the central organs, is the very essence of the disease. A case of this affection not long since fell under our observation which proved fatal. In this instance it was found impossible by any means to restore vital warmth to the surface. In another instance, an individual having been reduced extremely low by this disease, and the attending physicians, finding the usual remedies to be altogether inefficacious, (the usual modes of artificially warming the surface not being effectual) procured the warm skin of a recently-killed sheep, with which they enveloped the body. This proved singularly efficacious in re-animating the surface and equalizing action. The patient was promptly relieved by it. We cannot conceive of any thing more admirably calculated than this to effect the object proposed. The temperature is precisely such as would be most agreeable to the surface. It would be conveyed, too, through the medium of moisture which could not speedily evaporate, and thereby reduce the temperature. The fleshy side being applied to the skin, the woolly covering would serve to preserve its warmth for a great length of time. Besides, there is something, we know not what, in animal warmth which cherishes far more than artificial heat. The knowledge of the fact seems to be as old as the days of King David, but the retionale we cannot explain until we shall have learnt something more of the constitution of heat. It is certain that there are different modifications, even of animal heat, which are appreciable to our senses. In certain diseases, when the hand is applied to the surface, there seems to be something acrid in the heat which is given off from the body, creating a biting sensation—hence the *calor mordax*, &c. &c. of the older authors.

In the treatment of cholera morbus, while the usual internal remedies are in preparation, we lose no time in re-animating

the surface. We find it convenient to slip the patient down toward the foot of the bed, until the legs can be dropped over the foot-rail and plunged, nearly as high as the knees, in a deep bucket of warm water, into which a handful of salt has been thrown, and perhaps a spoonful of mustard. At the same time we apply cloths wrung out in hot water to the stomach, chest and abdomen. Often we also place billets of wood, which have been plunged into hot water and wrapt in cloths, all round the body of the patient. These means soliciting the fluids to the surface, and restoring the equality of nervous excitement, will certainly, in many cases, enable our internal remedies (opium, calomel, and diffusible stimulants,) to accomplish that which they might otherwise fail promptly to effect. In such cases the citadel of life is assailed by an impetuous enemy —the garrison is surprised and in danger of being cut off. It is true we may often foil the assailant by throwing succour into the fortress, but if we attack the enemy without, and create a diversion in favor of the vital powers, we shall most certainly achieve the victory. Such a course is as much stronger than the simple use of internal remedies, as double elective affinity is stronger than single.

Hysteria is another of those affections which are powerfully influenced by heat and cold. Almost every practitioner has seen a form of that disease, which at its onset, is marked by alarming and exceedingly distressing depression of the powers of life—the surface and extremities becoming cold and bloodless—the pulse almost entirely ceasing at the wrist, and the heart, lungs and great vessels being so overwhelmed by the accumulation of blood within, as to produce the utmost degree of oppression. There is then laboured breathing, deep sighing, or moaning, and palpitation of the heart. Here, it is true, we must immediately institute the treatment applicable to hysteria, but can we expect our patient to be relieved before there is produced a reflux of the fluids to the surface? Under such circumstances we proceed, with regard to external applications, precisely as in cholera, and we have seen such practice attended

with the happiest results. Recently we have treated a very extraordinary case of this kind, in which internal remedies (even the most powerful stimuli) were totally ineffacious, till warmth was excited on the surface. The patient subsequently had several similar paroxysms which her nurses were always able to subdue by the prompt employment of these conjoined means.

In the treatment of intermittent fever warmth is always, in the cold stage, an important palliative means, and is also often an important auxiliary in interrupting the paroxysms. Generally, the more brief we render the cold stage, by the employment of heat and other means, the less severe and protracted will be the subsequent stages. Hence most authors direct, in the cold stage, the employment of external heat. When intermittent fever has existed for a considerable length of time, and the ordinary means have been ineffectually employed, the judicious management of external warmth will be found greatly to increase the efficacy of our remedies. In such cases it is important to break the established habit of diseased action; consequently, when the hour of the expected chill approaches, we direct our patient to be placed in a warm bed—if he has, at the time, any sense of chillness, to have bottles of water applied to the feet, and perhaps around the body—we endeavour, indeed, to equalize as perfectly as possible, the excitement and heat of the body. By these means perspiration is ordinarily produced, but this we are to regard only as evidence of equal action. To aid in producing these results, we employ warm aromatic drinks. All this, however, must be accomplished without the employment of ardent stimuli, or of intense dry heat, lest we should hurry action too much, without equally diffusing it, in consequence of which, there will be danger of our producing local congestions. Moist heat is far preferable for the purpose of equalizing action and overcoming vascular obstructions, because it relaxes the cutaneous vessels, and by sympathy, probably influences the deeper capillaries in a similar manner.

When by the judicious employment of heat, the equality of circulation is preserved, the blood being no longer suffered to rush upon the deep-organs, overloading and oppressing them, the tonic medicines which we employ are always observed to exercise a more salutary influence. These, then, should be renewed in the interval, and we are persuaded that, when thus seconded by the equalizing influence of warmth, a less quantity of such medicines will produce the desired effect, and with far less danger of the occurrence of permanent congestions, indurations of viscera, &c. &c.

But external warmth is most imperiously demanded in that prostrating and often fatal form of intermittent, in which re-action takes place reluctantly, or not at all, and which often terminates in death without the occurrence of the hot stage. In such cases, internal stimuli will often alone be found to produce no effect whatever, unless actively seconded by external warmth. An epidemic of this character occurred during the last year in Annapolis and its vicinity, and in some of the lower counties of Maryland. Many patients were lost in the cold stage, without the slightest re-action having taken place. We have been informed by intelligent medical gentlemen, that in those cases, although occasionally all remedies were ineffectual, external warmth was found in those who survived, to be a most valuable and even indispensible means.

But it is not only when there is universal coldness and pallor of the surface and extremities, that heat is to be employed in the treatment of disease. In many affections, of absolutely an inflammatory character, there is often coldness and pallor of certain parts of the system, whilst others are hot, excited and engorged. In such cases, the important indication is to equalize excitement, and what can be more important in accomplishing this, than the employment of heat and cold, in such a manner as to equalize temperature? Thus, in certain affections of the head, accompanied with great determination of blood to that region, heat, and sense of throbbing, we often find the extremities to be cold and exanguious. It is the dictate of the plainest common sense, un-

der these circumstances, to apply cold to the head, and heat to the extremities. If we neglect either, we neglect half of our duty. Nothing can be more important than this effort to equalize excitement, when local inflammation has taken place in a feeble and exhausted constitution. In such cases, if we divert the blood from the engorged part, and restore it to those regions which it has for a time deserted, we produce the same effect on the local inflammation, that we should by abstracting blood from the body, and that too, not by weakening the powers of the system, but by absolutely increasing them, since the blood is retained in the body, restored to its proper channels, and the organs receive their accustomed stimulation and nutrition.

In certain febrile affections, the discriminating practitioner will often find occasion to employ local warmth, even when the general aspect and sensations of the patient would indicate a considerable degree of pyrexia. Often, when the face is flushed, the chest and abdomen hot, we shall discover that the knees, feet, ankles, wrists and hands, of the patient, are excessively cold. Now, in restoring the natural warmth and excitement of these parts, it is perfectly obvious, that we shall aid in reducing the high temperature of other parts. There are cases of typhous fever requiring the general application of cold to the surface, which, with great propriety, will admit of the simultaneous application of warmth to certain parts. Indeed, is there not in almost every form of disease, unequal excitement in the system; and is it not an almost universal indication to render action uniform—a circumstance absolutely essential to health? The physician then, should ever be ready to apply warm stupes with one hand, and ice with the other. Let us not, however, be understood to disparage other remedies; we merely claim a due consideration for the means of which we at present treat.

But warmth is, in some few instances, applicable as a remedy, even where there appears to be a morbid increase of heat in a part. This we have learned empyrically, if we cannot explain it physiologically. In certain inflammations of the

joints, we very well know that, when cold applications are often ineffectual in assuaging pain and allaying constitutional disturbance, these desirable ends are promptly accomplished by the employment of warm fomentations. Mr. Brodie informs us that relief may be expected from the application of warm stupes in inflammations of the joints, when the integuments are observed to be tense over the inflamed part. He supposes that ease is rendered by the relaxation, and relief of painful distension which exists. But we are inclined to think that the seat of pain is beyond the reach of any such influence from warmth and moisture. The effect must be one which is exercised through the medium of the nerves upon the deep vessels of the part. We have seen painful inflammation of the female breast, where there can not be any great tension of the integuments, relieved by the same means; also, chronic inflammations of the eyes. It will, we believe, generally be found, that the cases in which warmth is thus beneficial, are those which have existed for some time, and which have assumed an atonic character; for we by no means regard inflammation as being necessarily associated with increased or diminished action. It is undoubtedly an altered, and irregular action; but to restore the parts to soundness it is necessary to render the degree of action as nearly natural as possible. Hence many local inflammations are assuaged by cold applications, and some by warm.

But warmth, as a local application, is more especially applicable to local irritation, or that morbid excitation of the nerves of a part which is about to terminate in inflammation. Heat, especially when associated with moisture, as in fomentations and poultices, exercises a remarkably soothing influence upon the nerves. It relaxes the tissues of the part, and relieves the organs from painful tension, and probably exercises, also, a more direct influence on the nerves. In contused, lacerated, and gunshot wounds, the sensibility of the nerves is deadened; there takes place a suspension of their action, analogous to the suspension of the function of the blood-vessels in a chill. In a

short time, re-action will take place, and a high degree of irritation, indicated by pain, will result. It is important to cut short this period of torpor in the nerves; for, in proportion to the length of its continuance, will, for the most part, be the subsequent disturbance. Warmth and moisture accomplish this in the happiest manner. Hence the beneficial influence of poultices and fomentations after such injuries. After protracted surgical operations, also, when the wounded parts have been for a considerable time exposed to the contact of the atmosphere, to an unusual temperature, and to the contact of instruments, such applications greatly palliate the evil effects which are liable to result. When the lips of the wound have been brought as nicely in opposition as possible, we are accustomed, under such circumstances, to envelope the whole in a warm, moist poultice. Such an application will by no means interfere with union by the first intention, but rather promote it. We have heard it remarked by the late Professor Smith, of Yale college, than whom, perhaps, but few individuals of our country have been more extensively engaged in operative surgery, that after severe operations, his patients generally did better when the weather was warm. From this he drew two precepts: first, never to decline operating (in the climate of New England) on account of the warmth of the weather; and second, always to dress warmly all wounds inflicted by the knife. We do not mean that he always applied artificial warmth, but that he enveloped the part in soft dressings.

In the treatment of burns, warmth is undoubtedly often a remedy of indispensible utility. We, however, by no means assent to its universal employment, as recommended by some, or to the employment of an irritating degree of heat. Warmth is proper immediately after the removal of the cause of injury, for the purpose of preventing the abrupt transition from heat to cold; for it is often the transition which inflicts the greater mischief. The application of cold water, or pounded ice to a burned part has always appeared to us absurd in theory, and has

been observed to be injurious in practice. The first morbid state of a burned part is irritation. Often this is so intense that the sensibilities of the part are overwhelmed with it, and reaction does not immediately take place. The seat of the burn then often becomes cold and lifeless. This is especially apt to be the case, when cold applications have been injudiciously employed. Warmth is then an indispensible remedy, and it may be conjoined with those articles which rouse the vital sensibilities of the part.

Modes of employing heat.—To some of the convenient modes of applying heat to the surface we have already had occasion to allude, in the course of the foregoing remarks: we shall not, therefore, dwell upon them at length. The most perfect medium through which warmth can be imparted to the external surface of the body is water, or the vapour of water. This fluid is a vehicle which applies itself to the whole surface of the body, with the most perfect contact—it readily imparts its heat, also, in consequence, not of its being a good conductor, but because of the free motion of its particles. The temperature of water is also managed with the greatest ease. The effect of heat thus applied is aided by the relaxing influence of moisture. For these reasons, when there is general pallor and coldness of the surface, with congestion of the deep organs, we prefer to apply warmth through the medium of the warm bath. But sometimes, even in such cases, this use of warm water will be inconvenient, or injurious, in consequence of the extreme exhaustion of the patient. At other times the necessary vessels may not be obtained promptly enough to meet the emergency of the case. When the patient is so feeble as to be moved with danger, or when motion is painful and difficult, no more effectual method can be adopted than to apply to various parts of the body, and especially the extremities, stomach, chest, &c. cloths wrung out in warm water—or, what is perhaps still better, billets of wood dipped in boiling water and wrapped in cloths. These absorb a great deal of moisture, retain their heat for a long time, and ra-

pidly give out vapour. Heated bricks, which have been quenched in water, answer a similar purpose. When wetted cloths alone are used, we must be extremely careful that we do not suffer the dress or bed covering to become wet, or the wetted cloths to become cool, lest, from the evaporation which will follow, a counter-effect should be produced. It was a very favourite practice in New England, in the treatment of spotted fever, to employ boughs of hemlock, immersed for a time in boiling water, and then wrapped in cloths and placed by the body of the patient. These not only gave out aqueous vapour, but an essential oil which the plant contains in great quantity, and which is highly stimulating. When a soothing anodyne influence is desired, a decoction of poppy-heads, of hops, or other narcotic, is employed in a similar manner.

The mode of applying heat is also proper when, in consequence of the inequality of temperature in various parts; the general application of heat is deemed inadmissible. They can often be used, indeed, when it is proper to apply cold to other parts of the body. There is still another advantage, also, in our being able to continue warm stupes to the surface for a greater length of time than it is prudent to use the warm bath, and in our being able to repeat them with facility. The warm bath is observed to produce far more exhaustion than any other mode of applying warmth. This is not owing merely to the fatigue which the patient necessarily undergoes, but, I am inclined to think, in part, to the pressure exercised by the water on the surface of the body. This pressure must necessarily render respiration more difficult, and the exercise of it more fatiguing. Persons in pleasure-bathing are far less capable of muscular exertion than under other circumstances, and they are observed (we have experienced it ourselves) to become soon weary, or to faint from exertion too long continued. This pressure, too, must render the capillary circulation more difficult. The power of the heart is nicely adjusted to the pressure of the atmosphere. If that pressure be diminished, as in ascending high mountains, or, partially, by the application of cupping-

glasses to the surface, the capillaries are no longer so sustained as to resist the action of the heart; the blood rushes into them and they become painfully engorged. Precisely the reverse takes place when the pressure of the atmosphere is increased by immersing the body of an individual in water. The capillaries are then subjected to a pressure greater than natural—the blood is forced from them back upon the heart, which organ is then compelled to an unwonted exertion, in order to relieve itself of the load. To effect the circulation, then, the heart must necessarily labour more than under ordinary circumstances. These phenomina occur in a remarkable manner when the body is deeply immersed in water in the diving bell. We are informed that there then occurs a high degree of oppression in the chest; the surface becomes bloodless, and individuals thus situated are not capable of long continued exertion. Now, in ordinary immersion of the body, just beneath the surface, it is true that the pressure is not very great, but if any one will take the trouble to estimate the amount, he will learn that the additional pressure, to which the body is subjected, is about one fortieth of the whole pressure of the atmosphere. The pressure, indeed, is thus increased in the same degree that it is decreased by ascending a moderately high mountain. Now this increase of pressure on the surface of the body is certainly a strong objection to the employment of immersion, when the patient is feeble, and especially when there exists already a congestion of the deep organs, and an oppressed condition of the heart. It is under these circumstances, that we should resort to steam bathing. The vapour of water applies itself as closely, and as generally, to the surface of the body as water does—it requires little or no exertion on the part of the patient, and, instead of increasing the pressure of the incumbent atmosphere, it slightly diminishes it. It is for these reasons, undoubtedly, that steam bathing is observed to be far less productive of exhaustion than immersion, although continued for a much longer time.

The modes of employing the steam bath are various, but ought always to be simple, otherwise they will certainly not be generally employed. Ordinary ingenuity will accomplish the object with great ease. Indeed, it is effected in part by means which we have already named, especially the billets of wood, hemlock boughs, bricks, &c. &c. A method practised in New England, during the prevalence of spotted fever, was to place over the body of the patient, as he lay in bed, a box of boards, open on the under side to admit the body—the edges of the open side to rest on the bed. A vessel of boiling water was then placed near the bed (commonly a tea-kettle) and the nose of it being provided with a tube of some kind, the vapour was conducted under the box until a sufficient degree of heat was produced. We have practised the same thing in a manner even more simple and less annoying to the patient than this, and which will be found particularly useful when the lungs are concerned in the affection, and expectoration is difficult. It consists in placing over the patient a slight frame, and spreading over it sheets or blankets, in such a manner as to form a canopy. Within this, and on each side of the bed, may be placed a bucket of hot water, into which heated bricks should be thrown, which will immediately produce a cloud of vapour, completely enveloping the patient. The bed clothing should be so far removed as to give it access to the body. We have practised this method with the happiest effects in the case of a lady extremely low with inflammation of the lungs. Expectoration was almost impossible, in consequence of the extreme soreness of the lungs, and the toughness of the sputa. Copious expectoration resulted from the free inhalation of vapour, and the engorgement of the lungs seemed to be relieved by the derivation which took place to the surface.

Remediate influence of cold.—It is not our design to dwell so much at length upon the employment of cold in the treatment of disease, because, in this respect, we believe it is less important as a remedy, and because, so far as it is useful, we believe its virtues are better appreciated. We have shown that cold is

a far more frequent cause of disease than heat, and that heat is often the legitimate remedy of those diseases which arise from cold. But cold being the remedy which nature indicates for those affections arising from heat, cannot of course so frequently be called into requisition. It is to be borne in mind, however, that cold is often to be employed in the treatment of those diseases which arises from cold itself, and in which excitement has taken place from re-action. Cold, too, is sometimes to be employed in cases where there is feeble action, or torpor of the system, for the purpose of producing re-action, and actually stimulating the body. We dash cold water upon fainting individuals—we throw it upon new-born children, that seem still-born, and we sometimes employ it where there is general torpor of the system in fevers, for the purpose of indirectly rousing the powers of life.

Since the days of Sydenham, and especially since Currie wrote and experimented on fevers, there has probably been less prejudice against the employment of cold, than against that of heat. There is a tide in the fashion of medicine, as well as "in the affairs of men." The abuse of warmth, in the treatment of disease, before the time of Sydenham, brought upon it a reproach which it has not even now entirely cast off. Cool air, cool water to the surface, and cool drinks, are, at present, more in favour.

The writers on the employment of cold in the treatment of disease are so numerous, and so recent, that it would be a superogatory affair for us to dwell upon it. We must refer for more full information on this subject to Currie, Rush, Smith, Armstrong, &c. &c. We will merely remark, that cold is for the most part applicable to the general surface, when the whole surface manifests a temperature above the natural standard —provided the disease be one which is not liable to metastasis —and provided there exist no considerable congestion of any deep seated organ. The most remarkable diseases which demand its employment, are typhous fever and scarlatina. Cold is also sometimes applicable to the surface, even when it is far

below the natural standard of temperature, for the purpose of producing re-action. We have known the cold shower-bath to be used with very striking beneficial effects, in protracted typhus, the skin being, over the surface generally, far below the natural degree of heat—dry, harsh, and pallid, the pulse feeble and contracted—indeed, a general torpor of the whole system prevailing. A patient in that condition we have known to be taken from bed, placed on a rug, and to have three or four buckets of cold water dashed over his body. He was then promptly wrapped in warm blankets. The cold aspersion appeared to give a powerful impulse to the nervous system, the dormant powers were roused to re-action, the pulse became more vigorous, breathing more deep and free, the surface warm, and finally moist. This we have known to occur in more instances than one. The practice we learned from Drs. Powell and Pomeroy, of Burlington, in Vermont, and have been informed that they have practised it in many instances with success. It is a remedy, however, which should be employed with the nicest discrimination, lest there not being sufficient vital power for re-action, it should prove suddenly fatal.

When cold water is employed for the purpose of reducing temperature, as in the period of febrile excitement, we are inclined to think that it ought not to be copiously dashed cold upon the body, lest it should excite too much re-action. We prefer sponging the body frequently with tepid water, and to suffer the abstraction of heat by evaporation. This will be less apt to disturb the balance of action.

Cold water may often be applied with advantage to certain parts of the surface which are above the natural temperature, while, at the same time, other parts are morbidly cold, and require the application of warmth. Remarks on this subject may be found in an essay on typhus, by the late Professor Smith of Yale College.

The employment of cold lotions in inflammations is so familiar an expedient that it is unnecessary for us to remark upon it.

Adversaria.

Baltimore Infirmary Reports.

Art. I.—***Singular Case of Necrosis, in which a part of the thigh bone having been destroyed, the continuity of parts was restored by Ossification of the Muscles.***

John Lewis, a coloured boy, eleven years of age, small of stature, but hitherto healthy and active, was admitted into the Baltimore Infirmary, August 23d, 1829, for the treatment of disease of the thigh. The member was found to be tumid—something hotter than natural—soft, and apparently fluctuating in some places, and in others, especially near the knee, feeling as if the bone were irregularly knobbed. The general health was less impaired than might have been expected. The tongue was white, pulse a little quicker and more frequent than natural. Appetite rather inconstant, but rarely altogether absent. The skin was dry and harsh, but occasionally there occurred, at night, colliquative sweating.

After careful examination I became perfectly satisfied that pus was present in considerable quantity, and that the bone was undoubtedly extensively necrosed. I therefore immediately made an incision into the outer part of the thigh, above the external trochanter. Unfortunately, although the fluctuation seemed here to be most distinct, this incision did not freely lay open the abscess, and there escaped but an inconsiderable quantity of pus. The instrument undoubtedly divided that portion of the vastus externus which arises from the external division of the linea

aspera, and which forms a kind of partition between the anterior and posterior regions of the thigh. Two or three days after this, however, there took place a spontaneous discharge of fetid pus from between the ham-strings, near the knee. This opening having been dilated, the discharge became very copious, seeming to consist of crude pus largely diluted with serous fluid, and containing flakes of lymph, precisely of the character that is discharged from ordinary scrofulous abscesses, except that it was unusually fetid. Through this opening I introduced a probe obliquely upward, and immediately encountered the denuded, rough surface of dead bone. But this being not directly accessible from the spontaneous opening, I immediately dilated the incision which I had previously made, and examined the diseased organ with my finger. I found that a prodigious abscess had existed immediately around the bone—that I was able with my finger to touch every part of the circumference of the bone at that place, and that the muscles and tendons were completely detached. The shaft of the bone was in this condition to the extent of five inches. The lower extremity of the dead portion was very near the junction of the shaft and epiphysis. The periosteum appeared to be entirely destroyed. Above, shooting from the lower extremity of the upper portion of healthy bone, were two or three irregular spiculæ of bone, by which nature seemed to be endeavouring to restore the continuity of healthy bone, and to enclose the sequestra. One of these projecting on the inside of the thigh felt like an exostosis. The sequestra was, however, no where detached from the living bone.

Such being the condition of the parts, I determined to wait the operations of nature; indeed, it appeared to me that no other course could at that time be prudently pursued. I was anxious, also, to observe, from time to time, the recuperative process which might be instituted. The patient, therefore, was put upon a gentle tonic plan of treatment, for the purpose of obviating the colliquative discharges which seemed to be in some degree wasting his strength. He was kept constantly in the horizontal

posture, the limb being sustained in an easy attitude. In this condition he remained till the last of October. His general health was, in the mean time, not a little impaired. His tongue was white and occasionally dry—his appetite somewhat defective. He often had copious night sweats, and not unfrequently was annoyed with hectic diarrhea, attended with griping pains. This could only be relieved by the free use of oak bark enemata. Opium had little or no effect in arresting it.

At the end of this time, I again presented the patient before the attending class—dilated the opening which I had first made—introduced my finger into the cavity, and carefully examined the bone. It was found to be in the same state as before, except that it was more rough and decayed. I exercised some degree of force upon it with a lever, but found that it was still firmly attached at either extremity. There was still a large space between the bone and the surrounding parts, and no new bone had been formed in contact with the old. This cavity was filled with matter when means had not been recently employed to expel it, and, when emptied of it, the walls of the abscess were too rigid to collapse, but remained open and drew in air. On carefully examining the walls of the cavity, with one finger on the inside and another without, I discovered that they were formed of the internal layers of those muscles which arise from, and envelop the thigh bone. I discovered, too, that the most deeply seated fasciculi were evidently about being converted into bone—bony spiculæ were distinctly felt in many parts. The patient, in consequence of this disorganization of the muscles, had completely lost the power of moving the leg. I requested many of the medical pupils who were present, to examine the limb with care. Several gentlemen felt it, both within and without, and became satisfied of the condition of the parts.

I then remanded the patient to his bed, and directed that the same plan of treatment should be continued. I was careful that the opening which I had made should be preserved by introducing firm tents. My expectation was, that nature would soon

effect the disengagement of the dead bone at its extremities from the living, and that the shell, then forming in the muscles, would restore the continuity of sound parts. The patient was suffered to remain in this condition (being occasionally examined,) till December. I then became alarmed for the safety of my patient, on account of the very copious and offensive discharge which continued to be poured from the limb. The whole ward in which he lay was filled with the stench, and the dressers had extreme difficulty in the discharge of their duties. The hectic symptoms were more decided, and he appeared to be evidently losing ground. The shaft of dead bone seemed, indeed, to be operating as an immense foreign body to keep up irritation in the part. Amputation was thought of, and in this state of things would, no doubt, have been justifiable.

I determined, however, although the bone was still firm, to attempt its removal—thus to withdraw the source of local irritation, and to place the limb in the condition of a *fractured thigh*—trusting to the process which was then going on in the muscles to re-establish the continuity of the bone. I had so far succeeded in dilating the incision which I had previously made, that the bone, to a considerable extent, was easily accessible. Before applying an instrument to the bone, however, I dilated this opening upward, where the dead portion of the shaft extended beyond the reach of my finger. Then, with the chisel, Hey's-saw, bone-nippers, levator and strong forceps, I succeed in breaking up the dead bone. As soon as I had cut it entirely across, in one place, I discovered that the thigh was in the condition of a fractured member, and that a considerable degree of motion took place at the point of fracture.

Having removed nearly all the dead portion of bone, (to the extent of about four or five inches of the shaft,) I extended the limb, and, as the most convenient for this object, applied the apparatus of Hagedorn for the purpose of gently extending the thigh, and preserving its rectitude. The patient was placed on his back, upon a firm matress, and subjected to such treatment as the constitutional symptoms seemed to require. For a time

the discharge was as copious as before, and equally as offensive, but, in the course of two weeks, it began sensibly to diminish, as did also the hectic symptoms which appeared to have arisen from so exhausting a discharge. The cavity formed by the removal of the bone began to fill with granulations, and, from time to time, the limb appeared to become more and more rigid. At last, at the end of about eight weeks from the time of the operation, the limb was found on examination to have perfectly healed, there remaining not even the smallest fistulous orifice for the discharge of matter. The limb felt firm and sound, and had become so rigid that he could raise it without assistance vertically from the bed. The splints were then thrown aside, and, at the end of a few days from this time, he was able to leave his bed and to hobble upon crutches. At first he appeared to have no muscular command over the leg whatever. But, by constant efforts the leg appeared, at length, to become slightly moveable and the patella began to play. On examining the limb this day, March 27, 1830, I discover that he is able to bear his weight upon the member, and even to walk a little, without the aid of a crutch. The limb is much larger in diameter than natural. In place of the bone there seems to be a large mass of callus. The knee, leg, and foot, have their natural attitude—the patella plays with some freedom—he can slightly flex and extend his leg by the effort of the muscles. The limb is, however, nearly an inch shorter than the other. This circumstance arose from the difficulty of maintaining permanent extension in his feeble state (though, by the way, I have very little confidence in the utility of permanent extension in any case. No part of the body, not even the soles of the feet, can bear continued pressure, for a considerable time, without injury.) The condition of the lad is, therefore, such that I have no hesitation that, as regards its utility, the limb will, in a short time, be almost perfect.

Lithotomy.

The operation of lithotomy was performed in the Baltimore Infirmary, the sixteenth ultimo, on the person of John Morris, æt. 5. The patient had been afflicted for four years, the disease appearing to have originated in a deranged state of the digestive organs. I performed the operation in the method practised at present by some of the French and English surgeons. I employed a staff grooved neither on its dorsum, nor on its side, (the method of Mr. C. Bell,) but obliquely, and between these two aspects of the instrument. With this form of the instrument I find that there is less difficulty in striking the groove, and the knife is conducted with more precision and with less danger to the rectum. The cutting instrument employed was a straight narrow bistoury, which I struck directly into the groove of the staff, without making first an external incision. This incision was chiefly made as the knife was withdrawn. The length of time in which an important operation is accomplished is certainly not a proper test of its merit, but it evidences the facility which attends different modes of operating. The stone (weighing between two and three drachms,) was in this case removed in one minute and ten seconds from the time that the bistoury was taken in hand. The urine has now (ten days after the operation,) resumed its natural channel, the patient is well, dressed and playing about the house.

N. R. SMITH,

One of the Surgeons to the Baltimore Infirmary.

Article II.

In regard to Doct. Hughey's case of extirpation of the uterus, we would take the liberty to remark, that the operation does great credit to that enterprising young surgeon. That the patient ultimately died of abdominal disease, detracts nothing from

the merit of the achievement. The practicability of thus removing the organ was completely demonstrated, for the patient perfectly recovered from the effects of the operation.

An interesting case of excision of the cervix uteri is related in the last number of the American Medical Journal, by Doctor Gilliam, as having been performed by Doct. Strachan, of Virginia. He states this case to have been the first in which this operation has been successfully accomplished in this country. Doctor Hughey's case, having never been published, was of course unknown to that gentleman, and must claim priority in regard to date. It is also more important in its results, inasmuch as the whole organ was removed.—EDITOR.

Analytical Reviews.

SELECTED FROM THE MEDICO-CHIRURGICAL REVIEW.

ART. I.—*Observations on Local Diseases, termed Malignant. By Benjamin Travers, F. R. S. &c. Part II.*

[CONTINUED FROM PAGE 70, No. II.]

The wound of the operation, (supposing such performed,) heals kindly, but after a time an indurated tumour steals into notice at the angle of the cicatrix, or near it, and again marches on like the original growth. Mr. T. observes, that in no one stage is there any analogy to scrofulous action, a sentiment to which we must all respond. A chronic abscess of the breast has been frequently mistaken for scirrhus, and not long ago we saw a breast removed in consequence. It occasionally forms between the gland and the pectoral muscle, "when it lifts the gland, and may be felt obscurely at its edge."

"In scirrhus it is not suppuration which, as in scrofulous and other tumours, brings the disease to the surface, nor does the external skin ulcerate, until after the scirrhus. Its first and proper action is within itself. Encompassed by a dense wall, the centre breaks up by ulceration, constituting the state of occult cancer. Indeed the scirrhus is seldom removed so early as to be found with its nucleus unbroken. A sudden and extensive gangrene has been known to eliminate the disease completely, and upon this principle the cautery, arsenic, and other corrosives, are sometimes successfully employed by cancer curers. Mr. Cline had a patient in St. Thomas's Hospital many years ago, in whom the sloughing process went on spontaneously under a linseed meal poultice, to such extent, that the wound afterwards healed soundly. I have seen more than one case in which extensive cicatrices of ulcers existed with much puckering and stretching of the skin of the chest, and no vestige of the breast remained. In one of these, the patient, a lady

residing in Berkshire, resisted the pressing advice of a consultation of London surgeons to allow of the extirpation of the tumour many years since. She has been in the constant habit of taking the medicine then prescribed, the extract of hemlock, almost *ad libitum*, with which she supplies herself regularly from Apothecaries' Hall. She is still a stout, healthy-looking person, as formerly, and attributes her cure to the medicine." 214.

Mr. Travers alludes to the occasionally dormant condition of the scirrhous tumour, even to the close of the patient's life, and cites a case of his own in illustration. The occasional, though certainly too rare, removal of the scirrhus by sloughing, and its remaining through a period of many years inoffensive to the system, are considered by our author as "additionally conclusive as to the original strictly local character of the disease." Sometimes the ulcerative action, instead of excavating the breast, creeps upon the surface, and converts the entire front or side of the chest into a warty or tubercular ulcer, discharging profusely thin and acrid matter, whilst the subjacent tumour is large, hard, and immoveably fixed. In these cases the sufferings are great, the skin is "charged to saturation with the poison, a pimple, mole, or leech-bite being often converted into a tubercle, and not unfrequently the opposite breast becomes affected, and an inflamed absorbent or a chain of small tubercles extends across the sternum from one to the other." In other cases there are oblong folds and furrows of the skin, looking extremely like cicatrices, and depending, in our author's opinion, "on an interstitial, instead of ulcerative absorption, and partial but firm lines of adhesion between the skin and the pectoral muscle." The permanent obstruction or obliteration of the absorbents, together with the disease of the lymphatic glands, gives occasion to that enormous œdematous swelling of the inferior parts, which is among the last symptoms of this dreadful disease.

Medullary Cancer.—The differences between this and "Scirrhous Cancer," are so briefly and well pointed out by Mr. Travers, that we cannot do better than transcribe them.

"This species, also a morbid growth, differs from the scirrhous cancer, 1st. In its property of affecting any or all textures

without exception, skin, bone, muscle, fascia, tendon, ligament, nerve, membrane and gland of each description, blood-vessel, and all the viscera and organs of sense.

"2d. In travelling as much by the blood-vessels as the absorbents of the part, and therefore not affecting contiguous parts only, but remote districts of the body; structures altogether dissimilar, and often, many at the same time.

"3d. In external characters—which, however modified by structure, situation, and connection of parts, are the reverse of those of scirrhus, the tumour having a degree of elastic softness which conveys a sensation of fluidity, a uniform roundness, and a volume far exceeding that of scirrhus, and, in short, more resembling a deep collection of matter.

"4th. In internal characters—being uniformly lardaceous on section, or pulpy, or semi-fluid, and intimately blended with original textures, i. e. deposited in their interstices and proper cellular tissue. By its seat it is modified in consistence, being in bone of so much firmness as to be osteo-sarcomatous in appearance; also in colour, as in the eye and some other parts, hence the term 'melanoes;' and in the limbs where it reaches a formidable magnitude, being mixed up with the coagula of blood which has escaped from the veins destroyed by it, 'hematodes.' The extreme states of a fresh and decomposed brain present its different degrees of consistence; and its colour upon section is either opaque white or black, or a mixture of the two, a mottled grey and brown, or cineritious.

"5th. It differs last, but not least, from the scirrhous species, in being the disease of early rather than advanced life, and from the first a truly malignant and therefore a constitutional disease." 217.

It cannot fail to be remarked, that many theoretical notions are mixed up with the enumeration of purely structural distinctions in the foregoing passage. Take, for instance, the second head, where the medullary cancer is said to differ from the scirrhous, in "travelling as much by the blood-vessels as the absorbents of the part, and *therefore*, not effecting contiguous parts only, but remote districts of the body, &c." It is obvious that this is mere speculation, and neither supported by, nor capable of, proof. The explanation, too, of the occasional *melanoid* colour and *hæmatoid* consistence, by the *site* of the tumour, will not bear investigation.

Like scirrhus, the medullary cancer is unconnected with a suppurative process, but its characteristic action is first adhesive, then ulcerative, and seldom associated with gangrene. At the same time, we would observe, that the medullary tumour occasionally sloughs, and that to a considerable extent, a process which, though not identical with mortification, is yet allied to it. Mr. Travers remarks, that he has never known a patient survive this disease, after its removal by the knife, for a longer period than four years, and instances several cases illustrative of the observation. We can bear our testimony to the comparatively rapid return of this disease after the operation, and no doubt the voice of the profession will echo our author's melancholy prognosis.

The scirrhous cancer also develops itself at times, in remote organs, after the removal, and without the return of the external tumour, but by no means so often as the medullary disease. When a scirrhous tumour has passed into ulceration, the operation is seldom successful.

"There is, however, a great and obvious difference in the sympathy of the constitution of the scirrhus in different individuals. I should say there were two classes of cases, one in which the constitution might either be supposed to labour with the *materies morbi* before its local manifestation, or which, by the general and simultaneous failing of the functions of health, appears to invite or to be incapable of resisting the assault. As when mental disquietude, bodily fatigue, impaired digestive power, wasting and muscular flaccidity, sallow and haggard countenance, prurient affections, or erythematous inflammations of the skin, precede the accidental discovery of a small lump in the breast. In precisely such a case I was consulted, within six weeks from the discovery, by a widow lady of 57 years, who had suffered from a domestic affliction severely a year before, and upon immediate conference with Mr. Cline, the opinion given was decidedly adverse to the operation, although the local circumstances were yet as favourable as could be conceived. She died within two years, the disease running through all its stages.

"In the other and more frequent case, the actual enjoyment of health appears not to be incompatible with the slow progress of the scirrhus even for years, of which the pain or rather uneasiness is so inconsiderable as scarcely to draw attention to it.

Somewhat suddenly it becomes more uneasy from increase of size and weight, a short acute darting pain with a flush of heat is experienced at lessening intervals, and although the health is not very noticeably disturbed before the skin inflames and threatens, or begins to ulcerate, yet, in despite of strong animal spirits, there are obscurer indications to the medical observer—in the sallow complexion and lack lustre-eye, the languor and frequent head-ache, defective appetite and rest, with transient heats and wandering pains in different parts of the body, and especially in the loss of volume and firmness in the muscular flesh—that the poison is at work and circulating with every pulse.

"Where the constitution is affected as in the case first described, it is at least predisposed to be sooner irritated by any local malady, and to favour, rather than otherwise, those changes by which the deleterious qualities of morbid secretions are evolved, and the more rapid career of the disease to its termination is thus explained; where, on the other hand, the constitution is healthy and even vigorous at the time of the formation, its power of resistance both to the local irritation and to the changes which precede and promote the admission and action of the poison, is in proportion great, and the progress of the disease tardy." 221.

Mr. Travers is of opinion, that "scirrhus becomes a constitutional disease" long before any external ulceration takes place, and instances the early affection of the contiguous absorbent glands, as proof of the fact. It is certain that this glandular contamination materially lessons the chance of success from an operation; but it is equally certain, that comparatively few cases are the subject of consultation in which it is not more or less apparent. Mr. T. does not deem it, *per se*, a bar to the operation, for "the degree of induration and the state, especially the freedom from adhesions, of the principal tumour," must likewise be thrown into the scale. Mr. Travers does not deny that success has sometimes followed the operation when the cancer was already open, but still very judiciously throws these rare exceptions overboard, in deciding on the vital principle in the treatment of the scirrhus—its earliest possible removal.

Actual Origin and Nature of Cancer.—Mr. Travers observes, and probably with justice, that the *formation* and circulation of a poison in the blood, is the only rational mode of ex-

plaining the simultaneous or successive appearance of the same malignant disease in remote parts of the same individual. If this be granted, it follows, of course, that exclusively *local* contamination argues the non-constitutional origin; and diffused contamination the constitutional origin, of the disease. All this is fair enough, and consistent with sound reasoning; but the practical question resolves itself from a logical or metaphysical subtlety into plain matter of fact—is scirrhus in one or in the other of these classess; is it a constitutional disease or is it not? Mr. Travers, we imagine, sees the great difficulty of answering the question decidedly, but the following passage contains the pith of his opinion. The replies, we must confess, are somewhat in the ambiguous tone of the Pythia of old, but still they evidently shadow forth our author's idea upon the subject.

"Nor is it consistent with ordinary observation that the poison acts upon the system during the integrity of the tubercle, since persons generally recover, and finally, in whom the disease is freely removed in this early stage. On the contrary, if the tubercle be softened and undergoing ulceration, *i. e.* absorption, the disease recurs, however freely the part be removed, in the majority of cases; although, perhaps, a few years' extension of the term of life may be gained by the operation. The formation of the poison therefore is concomitant not with the adhesive, but the ulcerative inflammation; and it is fair I think to infer that the matter of the poison is generated not by the action which forms the tubercle, but by the series of actions instituted to destroy and remove it. But it is probable that the vessels which deposited the tubercle are the parents of those which nourish it, and from which, in the ulcerative stage of inflammation, the morbid secretion is derived." 225.

We before observed that, in medical reasoning, theories, however brilliant, and subtleties, however fine, must be tried, after all, by the common experience of common men. Is it, then, the fact that persons *generally* and *finally* recover, in whom the disease is freely removed in its early stage? This is a question not to be decided by rules of logic nor laws of ratiocination, but by experience, and by nothing else. Mr. Travers of course, believes in the correctness of his statement, and certainly he must have seen a great deal of the disease. Others, however,

of equal experience with himself, have been constrained to draw a more gloomy picture of the powers of the operation whenever had recourse to. Mr. Travers imagines that the system is not contaminated till the scirrhous tumour begins to ulcerate in its centre, or that the matter of the poison is *generated*, not by the action which forms the tubercle, but by the series of actions instituted to destroy and remove it. This is ingenious, but then we must step over a difficulty to get at it—*what formed the original scirrhous tumour?* The "constitutional contamination" from ulcerating scirrhus, is nothing more than the deposition of that scirrhous tubercle in other parts, *in its primitive, and, according to Mr. Travers, its non-malignant form.* See in what confusion we become entangled by acceding to Mr. Travers' hypothesis! The tubercle is not malignant till it ulcerates—the constitution is then affected, and forms, what? malignant, or, in other words, ulcerating tuburcles? No—tubercles in their adhesive and healthy stage. Thus, the effect and the test of *malignancy* is the greater or less universality of depositions *not* malignant.

Those who deny the malignant character of scirrhus from first to last, must necessarily get into such awkward scrapes as the above. It is safest and wisest to allow that scirrhus is essentially a malignant disease, keeping our eyes open, at the same time, to the fact of its occasional, though far from frequent, cure by operation. Before closing this part of his paper, Mr. Travers alludes again to the "medullary cancer," and hints at a connexion between it and scrofula. We must now, however, pass to the second portion of the Essay, which treats of the various situations in which these malignant diseases may appear. This promises to be the most valuable, because the most practical division of the subject, and we hail a general and complete history of the malignant tumours that attack the various compartments of the human frame, as an inestimable boon to the profession. Mr. Travers proposes to treat of these diseases in the following order:—1st. Of the malignant diseases of the face and head. 2d. Of the malignant diseases of the external

conglomerate glands, viz: the salivary, mammary, and testicle. 3d. Of the malignant diseases of the organs of generation in both sexes. 4th. Of the malignant diseases of the trunk, including the viscera; and the extremities. Under each division, he will shortly notice the diseases liable or likely to be confounded with these, their more obvious modifications by varieties of texture, and, lastly, observations on their medical and surgical management, will form the conclusion of the memoir. The plan is a noble one, but too extensive, we fear, to be carried into effect by any one man in the way which it deserves. The execution would embrace one third of the practice of surgery, and no inconsiderable share of that of physick. We wish our author well in his arduous task, of cleansing this Augean stable of the filth and rubbish that the vague observations and erroneous notions of more than 20 centuries have amassed and may perpetuate.

Malignant Diseases of the Head and Face. 1. *Cancer of the Face.*—"The Malignant ulcer of the integument of the face commonly begins in a small warty tubercle, hard, irritable, rather than painful, sometimes discoloured, so as to look like a dirt-spot. It is usually seated upon the side of the face, upon or between the zygoma and base of the lower jaw. It is also met with, though rarely, on the forehead, lacrymal, and infra-orbital fossa, and sometimes the chin. In the first stage it is slow—noticed even for years before it arouses the alarms of the patient. This is especially the case when obscured by the whisker, or situated in parts not obnoxious to the razor. When fretted by frequent handling, or wounded, or irritated by caustic and stimulant applications, it inflames superficially and becomes exulcerated, discharging a thin matter and scabbing by turns. It next acquires a broader base of induration, has a livid circumference, and an even and glossy surface of an unhealty brightness. There is an occasional sense of heat and soreness, but not amounting to pain. The health continues unaltered. The third stage into which the disease shifts, is that of extensive ulceration both in breadth and depth; the ulcer having an irregular margin and surface, and a profuse suppurative discharge of a peculiar odour. Exuberant fungous granulations are intersected by deep interstices or hollows, in which are lodged ash-coloured sloughs of the exposed fascia, muscles, vessels or nerves of the part. The countenance becomes dis-

figured by the encroachment of the ulcer upon contiguous parts and by partial paralysis. The pain is now frequent, if not constant, burning and shooting. The complexion, strength, and flesh undergo a gradual but sensible change—the mind becomes irritable and anxious—appetite and natural sleep fail, the pulse is rapid and small, and spontaneous bleedings take place at intervals. Ultimately death ensues from exhaustation owing to interrupted deglutition and continual irritation; and for the most part it is accelerated by repeated loss of blood." 230.

The patients whom Mr. T. has seen, have generally been florid and robust, seldom affected in their general health till the advanced stage of ulceration, sanguine of recovery, and, therefore, an easy prey to the bold bad quack, either in the profession or out of it. Mr. T. would say it was more incidental to the inhabitants of the country than of the town, as well as to the ages of from fifty-five to seventy, than any other period. The sore is a specimen of the most purely local cancer, and long after ulceration remarkably circumscribed. Caustic is strongly reprobated by our author, who observes that the proper remedy is free excision, both in breadth and depth, of the indurated warts or tubercles in the skin of the face, occurring at the stated and critical period of life. The absorbent glands are seldom so affected before ulceration as to contra-indicate the operation. In the stage of ulceration, when Mr. Travers thinks that its characters are too well marked to admit of a mistake as to its nature, a cure is hopeless, irritating applications destructive, and soothing ones only admissable. Such are, the watery infusion of opium, infusion of hemlock, &c. under a simple emollient or poultice, and the properly diluted ointments of the oxydes of bismuth and of zinc. In the stage of superficial ulceration, transient and fallacious improvements not unfrequently occur. The disease, on the whole, is not very common.

2. *Medullary Tumour of the Face and Angle of the Jaw.*—This is sometimes seated in the cellular membrane, more commonly in the lymphatic glands. Mr. Travers has seen it occupying the situation of the zygomatic fossa, and also, over the

parotid gland, covering this and a portion of the buccinator muscle. Such tumours are movable at first—of slow growth—little painful—increasing, from the size of a small bird's to a goose's egg, when the skin is universally adherent, erubescent, and polished. Their softness and appearance of pointing induces the inexperienced surgeon to puncture them, when blood, not pus, escapes. Mr. Travers has seen them situated on the hairy scalp, when "the subjacent bone is affected by the disease, or ulcerated by pressure before they reach any considerable size." Our own observation would lead us to conclude that, when the medullary tumour appears on the scalp, it *originates* in the cranial diploë. We could mention some curious cases, did our limits allow of the digression from analysis. The lymphatic gland over the parotid, and the glands at the angle of the jaw, are not unfrequently the seat of the medullary tumour, which, on section, exhibits a compound character, a mixture of the degeneration and the normal glandular texture. Mr. Travers mentions three cases of the disease in the several situations above-mentioned, in all of which the operation failed.

3. *Cancer of the Eyelids and Contents of the Orbit.*—"It begins in the form of a hard fretful pimply ulcer upon either palpebra, or one of the borders or angles of the tarsi. It is discoloured by inflammation and sometimes itches, discharges a thin matter, and scabs repeatedly. When it draws surgical attention it is an irregular sore, notching or puckering the border of the affected lid by removal of its substance, and creeping around the orbit. Its progress is slow, but after some time the conjunctiva of the palpebra becomes elevated, thick, and rigid. The ulcer at length environs the orbit and eyeball, and a luxuriant fungus overshoots, and together with the hanging remnants of the lids, buries the eye—so that, although the globe remains, it becomes difficult to be seen. The pain is itching and burning. The ultimate stage of the disease presents a horrible appearance. For a long time the globe remains (I have seen the cornea and humours clear) suspended, as it were geometrically, in the centre of the ruin—the malar and temporal bones are denuded, but an immense fungus mass encircles the orbit, and in part springing from it, is everted over the supercilium, nose, temple, and cheek. The globe at last perishes, but seems rather to yield to its complete insulation than to the destroying process which it has so long withstood." 235.

Two instances of extirpation are glanced at, in both of which the disease returned. Mr. Travers removed the lachrymal gland exclusively affected with scirrhus, and prior to internal ulceration. The patient continued free from disease for some years, but has since been lost sight of.

4. *Medullary Tumour of the Eye-ball and Contents of the Orbit.*—This disease has been so fully described by ophthalmic writers, that our author does not enter into particulars respecting it. He remarks, however, that the peculiar metallo-lustrous, or tapetum-like appearance of the fundus of the eye is *not* diagnostic of the disease, as he has seen several cases in which it has continued stationary, with the eye-ball dwindled; a fair presumption against malignancy. In these cases long alterative or salivating courses of mercury had been employed. Mr. T. has also lately seen a case which convinced him that adhesive inflammation of the choroid coat, terminating in a deposit of lymph, which undergoes a vascular organization between that membrane and the retina, "presents an appearance so exactly resembling that of the incipient medullary cancer, as to put it beyond doubt that the real nature of the appearance, if not the occasion, is one and identical in both cases." The case was that of a young lady, in which it followed a wound with a pair of fine scissors, which had passed obliquely between the margin of the iris and the ciliary body.

"The best diagnosis is founded on the increase of volume of the eye-ball, or the contrary, prior to the giving way of the tunics. Even this, and loss of shape, and discoloured tumours of the sclerotic are, however, insufficient, as all may be produced by disorganizing choroiditis; but the progressive advance of the tumour to the cornea, and the shrinking and sloughing of the latter membrane, which happens prior to the protrusion of the fungus, is decisive of all doubts. The hydrophthalmic enlargement, or the direct collapse by interstitial absorption of the contents of the eye-ball, are sure indications that the disease is not malignant." 237.

Medullary cancer is frequently seated in the fatty membrane at the back of the globe.

"An extraordinary globular tumour is formed round the ball, of which the perished cornea forms the centre. It projects, stretching and so separating the lids, that they girt tightly the base of the enormous swelling. I have seen several children the subjects of this affection. The growth is sometimes confined to the upper or frontal aspect of the orbit. The upper lid is then prolonged and stretched over the globe so tightly that it is difficult, if practicable, to obtain a view of the latter. The medullary matter is of a granular or ricy consistence, and pervades and destroys the muscles, periosteum, and finally the bony vault of the orbit. I have seen its extirpation boldly performed; but its re-appearance has been almost immediate, and its progress quick to destruction." 238.

Mr. Travers never knew an instance in which medullary cancer of the eye failed to return after the operation. When firm adhesion exists between the lining membrane of the orbit and tubercles of the globe or the nerve, even to the foramen opticum, the operation is very difficult, and unsatisfactory in its result.—Deep-seated disorganizing inflammation is apt to be mistaken for this disease, but the transverse section of the globe is an efficient remedy and proper test, which should always be practised if a doubt of the nature of the case exist. In the malignant disease, a small discharge of blood and black pigment, or coagula stained with it, ensues, without collapse of the globe; in the other, a discoloured fluid escapes, the globe collapses, and the cure is complete.

Abstract of Domestic Medicine.

The American Journal of the Medical Sciences.

The February number of this work is a formidable volume of no less than three hundred pages. We mean no disparagement, for certainly it is creditable to American talent and *industry*, but when so ponderous a book challenges our attention once in three months, and instead of finding a rich collection of facts—of original suggestions and interesting intelligence, we find ourselves compelled to wade through formal treatises which are made the vehicles of a few new ideas—reviews of medical works made up of insulated extracts, instead of graphic analyses of entire works, we cannot but express an apprehension that the periodical works of the day are departing from their proper limits as the "abstracts and brief chronicles of the times." A great object of competition among editors seems now to be, to present their readers with the greatest number of closely printed pages. Is not this "a pitiful ambition"? Within ten years journals have grown to twice their former size. This would be less startling if modern invention, so fertile in new devices, could only double the speed of our eyes and intellects in reading a book; but, unluckily, although there are machines which print both sides of a sheet at once, there are no spectacles through which we can read and understand both sides of a leaf at the same moment. We believe that some of our friends are industrious readers, but we know not one of them who regularly reads the whole mass of even two of the ponderous journals of the present day. There is a tact in reading, however, and the eye of a judicious reader, it is true, will rapidly analyze the pages of such a book.—This is a bad habit of reading, nevertheless, but it is one into which the infinite prolixity of writers absolutely compels us. Is it not better, then, that the editor should analyze, and the writer condense, and books be furnished which we may have patience to read thoroughly. If one needed straw, chaff, and bran, no doubt he would choose to purchase his wheat in the sheaf; but the majority would prefer not to do their own threshing, winnowing, and sifting. We repeat, that we do not particularly censure the above named work; our remarks are applicable to many others. We proceed to analyze some very excellent papers which it contains.

Art. 1. *On Absorption. By Professor Samuel Jackson, M. D.* This is a very excellent elementary lecture, but not suited to the pages of a journal. The simplest kind of absorption Professor J. states to be the molecular; it takes place in the simplest form of animal existence, in which each particle or molecule has an independent life, and attracts to itself the materials of its growth without the aid of vessels or other common organs. It is analogous to the imbibation of a sponge. In man, the process is, in part, effected in this manner, and in part by lymphatics and veins. By these are accomplished *external* and *internal* absorption, terms which explain themselves. Dr. J. seems to consider the question relative to venous absorption as settled. On the authority of Fohman he denies the existence of direct communicating branches, as asserted by Lippi to pass between the venous and lymphatic trunks, and which seemed to contravene the results of Magendie's experi-

ments. In proof of venous absorption, Dr. J. relies on the experiments of Magendie, on the fact that no lymphatics exist in the brain, on the non-absorption of water, alcohol, &c., by the lacteals, and the uniform absorption of them by the mesenteric veins—also the rapidity with which colouring and odorous substances enter the veins. Dr. J. also adopts the belief of Broussais, that, in the circulation, much of the blood is extravasated into the textures of the organs, and again drunk up by the veins. This, he says, can be proved by microscopic observation. Certainly this is effected in the erectile tissues. The writer does not, like Magendie, deny the function of absorption to the lymphatics, but thinks, from their analogous arrangement and structure, that they must enjoy this office together with the veins. He believes, however, that they chiefly exist for the purpose of returning the white blood which circulates in the colourless organs, as the veins return the more gross fluids.

To explain the introduction of fluids into absorbing vessels, and their transmission by them, (a deplorable hiatus in physiology,) the Professor resorts to the power of *exosmose* and *endosmose*, which has been set forth by Dutrochet. We believe there is truth in it. Galvanism is the essence of this power. By its current we have long known that fluids, and even solids can be transported through pervious tissues, and even through unorganized matter. Whenever vesicles, pouches, or sacs, containing a fluid, are in contact with a fluid of less density, the last is constantly introduced within the vesicle or pouch, and if a tube be attached to it, will rise to a considerable height. This is endosmose, while *exosmose* is the passage of the more dense substance from within the vessel or sac. These *currents*, it appears, can be effected with a great deal of power.

Art. 2. *Case of Aneurism of the Innominata cured by ligature placed on the carotid beyond the tumour. By Professor Mott, of New York.* This case is very interesting, inasmuch as the propriety of the surgical expedient here resorted to is now undergoing discussion. The object, since the time of Hunter, always being to check the circulation *through* aneurismal tumours till nature can effect their consolidation, Brasdor recommended, in some cases, to tie the artery beyond the tumour. Mr. Wardrop acted on the suggestion, and succeeded. So has Professor Mott in the present instance. The patient had a pulsating tumour projecting above the margin of the sternum, of the size of a walnut. On applying the stethoscope there was heard a whizzing sound. The tumour seemed encroaching on the chest—respiration was impeded by any exertion, and especially by pressing the tumour. The pulsation of the carotid was feeble—so also was that of the subclavian. No pulse at the wrist, or in the small branches of the carotid. On the 26th September, the Professor tied the carotid, intending, should it be necessary, subsequently to secure the subclavian. On the 22d the tumour had entirely disappeared—the wound had healed—arm weak—fingers thick and clumsy—arm œdematous—no pulse at wrist—breathing easy—cough less—sleep natural. The case may be regarded as successful. It is the first operation of the kind which has been performed in our country.

Art. 4. *Case of successful Excision of the Cervix Uteri. By J. B. Strachan, M. D., reported by T. F. Gilliam, M. D., of Virginia.* A very creditable achievement. The operation was performed on the person of a lady aged 33, in whom the cervix uteri was affected with extensive scirrhus and fungous growth. The operator drew down the diseased cervix with his fingers alone, almost as low as the os externum, this being rendered more easy by the relaxation of the parts. It was thus made accessible to the scalpel, which was found to be the most convenient instrument for the operation.—The knife penetrated none of the adjoining cavities, in effecting the circumcision of the cervix. Common dressings were applied. There was but little hemorrhage. Pains, like those of labour followed, and seemed to arrest the hemorrhage;—they required anodynes. Subsequently, there were symp-

toms of inflammation in the lower belly, but they yielded to judicious treatment, and the patient recovered.

Art. 5. *Observations on Pyroligneous acid in the treatment of Gangrene, Ulcers, &c. By Thomas Simons, M. D., of South Carolina.* Dr. S. uses that variety of the acid of the shops which is transparent, and which, when agitated, shows small crystals floating in it. He dilutes it with equal parts of water, gradually still more diluting it as the sore improves. It should produce smarting. He applies it through the medium of lint. If it be too strong, it will cause the surface to turn white. The Doctor relates cases of gangrene treated with it in which the remedy was decidedly beneficial. But a case, which he regarded as fungous hematodes, we are persuaded was not that disease.

Art. 6. *Use of Tart. Emet. Ointment in Chorea. By Charles Byrne, M. D., U. S. Arsenal, near Baltimore.* In an interesting article on this subject, the writer first reminds us of Jenner's employment of this remedy in chorea, also of the experience of Mr. Hunter, of Glasgow, and of Dr. Wharton, of Virginia, in its favour. He then relates two strongly marked cases, in which he employed it with the most happy effects, after premising the usual correctives of the constitution. He directed two drachms of the unguent of Tart. Antim. to be rubbed along the whole spine, three times a day, till a crop of pustules appeared.

Art. 7. *Case of Aneurism by Anastomosis in which both primitive Carotid Arteries were tied. By Professor Mussey, of Dartmouth college.* This is an instructive case, and was very ably managed. The tumour, of 2 inches elevation, was seated on the vertex of the head, in a man of 20 years—had existed from birth, but actively growing only for three years previous—occasionally had bled largely. Twenty arteries, nearly of the size of goose quills, were seen pulsating on the head and entering the tumour. The left temporal was very large. Professor M. tied the left carotid 20th September. The tumour became a little less tense and livid, but still it received an abundant supply of blood. The right carotid was tied on the 12th. Functions of brain not disturbed by it, nor fainting produced, nor loss of muscular power. Compresses were applied, and the tumour diminished for four weeks; then again increased, and began to pulsate. The surgeon determined to extirpate it. He slowly and cautiously dissected away the whole mass from the pericranium, compressing the vessels as the blood gushed from their divided extremities, and occasionally delaying to secure them with ligatures. The patient bled frightfully—lost two quarts of blood. We have the highest respect for the skill and intelligence of Professor M., but we cannot help thinking that they would have "managed this thing better in France." Would there not have been less blood lost if the operator had boldly swept off the tumour with rapid strokes of his knife? This need not have occupied a minute, and there would not have been much more bleeding from all the arteries, simultaneously cut, than from two or three. The whole being removed, compression could have been very effectually made on the firm cranium, and the vessels secured. By securing them in succession, as they were cut, compression must have been very inconveniently made, and the same tortuous vessel was probably tied more than once. Had there been incontrolable bleeding, M. Dupuytran would have flourished his hot irons. This case shows the inutility of withholding a part of the blood from such a tumour, when the disease is on the median line, where the anastomosis is most free. Had it been on either side, the result of tying the arteries might have been more favourable.

Art. 10. *Reports of cases treated at the Baltimore Alms-house Infirmary. By Thomas H. Wright, M. D.*

Dr. Wright's Reports are some of the most valuable pages of this work. They are written with elegance and scientific precision—are full of sound pathology and efficient practice.—Case 1st. is one of chronic induration of the stomach. Patient aged 43, tall, spare, dark complexion. Symptoms,

(March 20, 1829) chronic pain of stomach and bowels, remittent, commencing in stomach, propagated to bowels—paroxysm resembling painter's cholic. Uneasiness in stomach nearly constant; in bowels lasting five hours; patient seeking relief by lying on the belly. No fever, tongue clean, bowels slow, urine free, sometimes clear, often red, urea abundant, occasionally much mucous. Eating aggravated pain, every mouthful producing sense of weight in stomach; hence but small quantities of food could be taken, and but at long intervals.

No difficulty in swallowing; sometimes vomiting of glairy fluid, some time after food had been taken. Tenderness of epigastrium, *hard sensitive point* under the anterior portion of the left cartilaginous border, two inches from end of sternum. Belly not hard, but very flat. *Diagnosis*—"Chronic gastric, irritation advanced to positive lesion; contraction and condensation of stomach;" chronic nephritis; hypertrophy of kidney, and contraction of coats of bladder. In progress of disease the lungs gave evidence of slight organic derangement. Died, May 9th. On examination, small ulcerous cavern found in superior lobe of left lung. In the abdomen, omentum reduced to thin membrane an inch broad. Cavity of stomach very small, longitudinal plates of mucous membrane much raised, widely separated, of a dark colour, remarkably contrasted with the pearl-white surface of the sulci. No recent bloody infiltration. Cut edges greatly condensed, half an inch thick, less hard than scirrhus, but dense, firm, coriaceous, with intersecting bands, coats confounded. Œsophagus and duodenum healthy, and the orifices of the stomach no more diseased than other parts. In the middle anterior region of the stomach was a point thicker, harder, and rougher than the rest, which was probably the *hard sensitive point* felt before death. Kidnies and bladder found as anticipated. "This case," says the intelligent writer, "strongly illustrates a result by no means common, yet perhaps more frequent than we are aware, of that irritation of the stomach, called dyspeptic disorder, when long continued and aggravated by great errors of diet."

Case 3d is a very interesting one of aneurism of the descending aorta, producing asthma organicum. Patient, a washerwoman, admitted, March 1st. Had caught cold in Feb., had chills and fever, pain in breast, dyspnœa, cough, hoarseness, was very ill, but soon recovered of all, except difficult breathing, short cough, rough whispering voice. Health described as good previously. Symptoms on admission, short wheezing respiration, frequent abrupt cough; no expectoration, but discharge of frothy sputum from larynx and fauces. *No pain or soreness in breast*, chest sounding well, except upper third of sternum, and under left clavicle; expansion of thorax equal on all sides; voice and speech nearly abolished; no fever, no gastric, hepatic, or cepholic derangement; tongue clean, appetite good, evacuations natural. *Diagnosis*—Chronic engorgement of mucous membrane from laryngitis was suspected. Remedies employed; calomel, squills, antimony, &c., counter-irritation to chest. General health remained the same; no improvement in breathing, &c. Ptyalism was excited, but with no advantage. Dr. W. then suspected asthmatic form of pulmonary embarrassment, unusually profound and protracted. Prescribed accordingly, but with no benefit. Next suspected enlargement of bronchial glands and employed iodine—still foiled. May 29th, patient suddenly died of suffocation.

Post-mortem examination revealed sound state of the lungs—no infiltration in thoracic cavity or pericardium, bronchial glands large but soft—firm body found occupying the whole upper space of left thorax—round and smooth, closely attached to left side of spine. Adhesions close and strong for five inches. Substance within the tumour of yellowish green hue, solid pulpy feel, covered by regular sac, very thin, peeling off easily, with smooth inner surface not incorporated with contents. The tumour was an aneurismal enlargement of the descending aorta, beginning at the left subclavian—greatest circumference 6 to 7 inches—solid and round every where, except

that along the concave arch line of the aorta there was a free canal, smaller than the calibre of the artery, and communicating with the open part of the aorta at both ends. In this was found a thin stratum of coagulated blood, and none elsewhere. The greenish concrete, filling the tumour, was like the pulp of an unripe peach—it undoubtedly was lymph—uncertain whether slowly deposited from blood, or remains of coagula. The tumour was found adherent to the side of the trachea, and pressing so firmly as to nearly close the passage into the bronchii. Aorta, near the heart, much dilated. In this case the usual symptoms of aneurism were absent—pulse was always regular—no sudden paroxysms of distressful breathing—no agitation, coldness, sweating, tremors, swooning—no external pulsation, none of the aneurismal thrill so characteristic. This was owing to the firmness of attachment and to the pervious state of tumour.

Art. 11 and 12, appear to be well written papers, but are not suited to our purpose.

Art. 13. *Case of concealed Phthisis, illustrative of Sympathetic Irritation. By W. M. Fahnestock, M. D.* Patient, female, æt. 24, small, brunette, irritable temperament, mother of the sixth child, reduced to very delicate state by last confinement, Oct. 1824. In December, constriction of chest, præcordial uneasiness, deep obtuse pain below the clavicles; soon increased to produce dyspnœa, dry cough, &c. A few days after, pain still more acute, extending through shoulders to the neck and back of head; skin dry; bowels constipated; pulse 100—bleeding, 16 oz., and purgatives. Jan. 7th, no mitigation; pulse 120; skin dry; head painful; eyes protuberant and watchful; fever every afternoon, v. s. 12 oz.; laxatives daily; refrig. mixt.—anodyne at night; epispastic to neck; sinap. to feet. 10th, debility and aggravation of symp., pulse 140, weak; head shaved and blistered; tinct. digital. 13th. No abatement—extreme pain in teeth; foment. scarafic. general treat. continued. 16th. All the remedies persevered in sedulously with no good effect. Yielding to patient's entreaties, extracted four molar teeth with no benefit, but threw disease upon more vital part. Rigors and nausea, followed by pain and oppression at epigastric region. Blister over this region—sal. nitre, 1 drachm; sacch. alb. 2 drachms; emet. tart 2 grs.; aquæ puræ, 4 ounces; lavd. comp. 2 drachms.—M. dose, table-spoonful every two hours. 22d. Mixt. produced sensation of cold and spasm in stomach—reduced pulse to 110, though occasionally rising to 130. Calomel in small doses, and enemata. 27th. Same state; ipecac. added to calomel—blister renewed. 30th. Symptoms similar till last evening; during night another mitigation; pain left stomach and *fixed itself in thorax*. Following evening rupture of an abscess in chest, with copious, suffocating discharge of pus. Then followed a rapid train of hectic symptoms—purulent expectoration; night sweats; collequative diarrhea, &c. &c., which soon put a fatal termination to the case with all the traits of phthisis.

Our subscribers will greatly oblige us by the early communication of all interesting medical intelligence. We shall furnish a comprehensive summary of foreign intelligence for our next. We trust that the pains which we take to condense, and bring within the compass of our journal, a variety of information, will, in some degree, compensate for the small number of our pages, which, however, will soon be extended. Our enterprise is humble, but we trust not the less likely to succeed.